AMENDMENTS TO THE SPECIFICATION

Page 6, amend paragraph 1 as follows:

In the discharging surface treatment method according to a first aspect of this invention, a powder mixture is formed, comprising as one component: (a) a ferrous-family metal powder or a non-ferrous [[-family]] metal powder, wherein each of the metal powders can be formed of one or plural metals; and, as a second component, (b) one or a plurality of metal carbides, wherein the elemental metal of the carbide or carbides belongs to the ~~IVa, Va or VIa~~ IVB, VB or VIB families in the Periodic Table; the non-ferrous [[-family]] metal powder having the same composition as the treatment target; and heating the powder mixture to a temperature at which the component (a) starts to melt to form an electrode serving as a discharge processing electrode, and the electrical conditions at the time when the base member of the treatment target is directly subjected to a discharging surface treatment and the electrical conditions at the time when a hard coat film that has been formed is subjected to a discharging surface treatment are altered according to the characteristics of the treatment target material.

Page 6, amend paragraph 2 as follows:

In the discharging surface treatment method according to a second aspect of this invention, a powder mixture is formed, comprising as one component: (a) a ferrous-family metal powder or a non-ferrous [[-family]] metal powder, wherein each of the metal powders can be formed of one or plural metals; and, as a second component, (b) one or a plurality of metal carbides, wherein the elemental metal of the carbide or carbides belongs to the ~~IVa, Va or VIa~~ IVB, VB or VIB families in the Periodic Table; the non-ferrous [[-family]] metal powder having the same composition as the treatment target; and heating the powder mixture to a temperature at which the component (a) starts to melt to form an electrode serving as a discharge processing electrode, and the electrical conditions at the time when a hard coat film that has been formed is subjected to a discharging surface treatment are altered at least once according to the characteristics of the treatment target material.

Page 7, amend paragraph 1 as follows:

In the discharging surface treatment method according to a third aspect of this invention, a powder mixture is formed, comprising as one component: (a) a ferrous-family metal powder or a non-ferrous [[-family]] metal powder, wherein each of the metal powders can be formed of one or plural metals; and, as a second component, (b) one or a plurality of metal carbides, wherein the elemental metal of the carbide or carbides belongs to the ~~IVa, Va or VIa~~ IVB, VB or VIB families in the Periodic Table; the non-ferrous [[-family]] metal powder having the same composition as the treatment target; and heating the powder mixture to a temperature at which the component (a) starts to melt to form an electrode serving as a discharge processing electrode, and the electrical conditions at the time when the base member of the treatment target is directly subjected to a discharging surface treatment and the electrical conditions at the time when a hard coat film that has been formed is subjected to a discharging surface treatment are altered according to the characteristics of the treatment target material, while the electrical conditions at the time when the hard coat film that has been formed is subjected to a discharging surface treatment are altered at least once according to the characteristics of the treatment target material.

Page 9, amend paragraph 3 as follows:

In the discharging surface treatment device according to a tenth aspect of this invention, a powder mixture is formed, comprising as one component: (a) a ferrous-family metal powder or a non-ferrous [[-family]] metal powder, wherein each of the metal powders can be formed of one or plural metals; and, as a second component, (b) one or a plurality of metal carbides, wherein the elemental metal of the carbide or carbides belongs to the ~~IVa, Va or VIa~~ IVB, VB or VIB families in the Periodic Table; the non-ferrous [[-family]] metal powder having the same composition as the treatment target; and heating the powder mixture to a temperature at which the component (a) starts to melt to form an electrode serving as a discharge processing electrode. Moreover, the above-mentioned device is provided with a switching unit which alters the electrical conditions at the time when the base member of the treatment target is directly subjected to a discharging surface treatment and the electrical conditions at the time when a hard coat film that has been formed is subjected to a discharging surface treatment according to the characteristics of the treatment target material.

Page 10, amend paragraph 1 as follows:

In the discharging surface treatment device according to an eleventh aspect of this invention, a powder mixture is formed, comprising as one component: (a) a ferrous-family metal powder or a non-ferrous [[-family]] metal powder, wherein each of the metal powders can be formed of one or plural metals; and, as a second component, (b) one or a plurality of metal carbides, wherein the elemental metal of the carbide or carbides belongs to the ~~IVa, Va or VIa~~ IVB, VB or VIB families in the Periodic Table; the non-ferrous [[-family]] metal powder having the same composition as the treatment target; and heating the powder mixture to a temperature at which the component (a) starts to melt to form an electrode serving as a discharge processing electrode. Moreover, the device is provided with a switching unit which alters the electrical conditions at the time when a hard coat film that has been formed is subjected to a discharging surface treatment at least once according to the characteristics of the treatment target material.

Page 10, amend paragraph 2 as follows:

In the discharging surface treatment device according to a twelfth aspect of this invention, a powder mixture is formed, comprising as one component: (a) a ferrous-family metal powder or a non-ferrous [[-family]] metal powder, wherein each of the metal powders can be formed of one or plural metals; and, as a second component, (b) one or a plurality of metal carbides, wherein the elemental metal of the carbide or carbides belongs to the ~~IVa, Va or VIa~~ IVB, VB or VIB families in the Periodic Table; the non-ferrous [[-family]] metal powder having the same composition as the treatment target; and heating the powder mixture to a temperature at which the component (a) starts to melt to form an electrode serving as a discharge processing electrode. Moreover, the above-mentioned device is provided with a first switching unit which alters the electrical conditions at the time when the base member of the treatment target is directly subjected to a discharging surface treatment and the electrical conditions at the time when a hard coat film that has been formed is subjected to a discharging surface treatment according to the characteristics of the treatment target material, and a second switching unit which alters the electrical conditions at the time when the hard coat film that has been formed is subjected to a discharging surface treatment at least once according to the characteristics of the treatment target material.

Page 21, amend paragraph 1 as follows:

A method of manufacturing the discharge processing electrode 12 will now be explained. A powder is mixed with a ferrous-family metal powder, or non-ferrous metal powder, as a simple substance or a combination of a plurality of metals, wherein the powder is formed by a simple substance or a combination of a plurality of carbides of metals belonging to the ~~IVa, Va, and VIa~~ IVB, VB, and VIB families in the Periodic Table (for example, WC, TiC, TaC, etc.), and wherein the ferrous-family metal powder such as Fe, Co and Ni, or non-ferrous metal powder having the same composition as the treatment target (for example, Al alloy powder, etc.), further wherein the powder mix is compressed and molded into a predetermined shape, thereby manufacturing a green compact electrode. Then, this is put into a vacuum furnace, etc., and the temperature inside the furnace is gradually increased so as to harden the green compact electrode to a degree, for example, approximately as hard as chalk so that it has sufficient strength to withstand a mechanical machining process and also is not hardened too much (this process is referred to as "incomplete sintering process"). In this state, the ferrous-family metal such as Co starts to melt and seep into gaps between carbides, thereby forming a so-called solid solution. In contrast, at contact portions between the carbides, although mutual bonding progresses, the bonding is weak because the temperature is comparatively low with the result that a main sintering process is not attained. The discharge processing electrode in this state, which has been subjected to the incomplete sintering process, is taken out, and machined and sized to a predetermined shape. Thus, this is used as the discharge processing electrode 12.